

Patent Claims:

1. A mobile measuring device for monitoring leaks on gas lines, characterized by an electronic navigation system.
2. The device as claimed in claim 1, characterized by a satellite position measuring system.
3. The device as claimed in claim 1 or 2, characterized by a computer unit (18) with a geographic information and documentation system.
4. The mobile measuring device as claimed in one or more of the preceding claims, characterized by electronic documentation of the measured results.
5. The mobile measuring device as claimed in one or more of the preceding claims, characterized by acoustic and/or optical guidance of the operator, using calculated navigation data.
6. The mobile measuring apparatus as claimed in one or more of the preceding claims, characterized by a supporting/measuring wheel (6).
7. The mobile measuring device as claimed in claim 6, characterized in that, by using the supporting/measuring wheel (6), a track of the path covered is recorded with the aid of the computer unit (18).
8. The device as claimed in one or more of the preceding claims, characterized in that the satellite position measuring system is coupled with sensors on the measuring wheel (6) and/or in the measuring electronics (12), which extrapolate the position information by generating a distance vector in the computer unit (18).

9. The device as claimed in claim 8, characterized in that the direction component and/or the magnitude of the distance vector is/are generated via an electronic compass, an orthogonal pair of speed sensors, a two-axis orthogonal acceleration sensor or a gyroscope.
10. A method of monitoring gas lines, characterized in that a path predefined by an electronic navigation system is followed by means of a mobile measuring device.

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